

REMARKS

Applicants submit the following remarks in response to the Office Action mailed September 12, 2006. Claims 19-26 are currently pending and under consideration. Favorable reconsideration of the subject application is respectfully requested in view of the following remarks.

Objection to the Specification

By the present amendment, Applicants have amended the Cross Reference To Related Applications section to indicate that USSN 09/861,240 is abandoned, as noted by the Examiner.

Rejection Under 35 U.S.C. § 101

Claims 19-26 stand rejected under 35 U.S.C. § 101 on the basis that the claimed invention is inoperative and therefore lacks utility. Specifically, the Examiner asserts that the claims recite a method of inducing an immune response specific to the *Chlamydia* CT875 protein using a polypeptide sequence recited in SEQ ID NO:140. However, the specification teaches that SEQ ID NO:140 corresponds to the CT622 protein, whereas SEQ ID NO:139 corresponds to CT875. Therefore, the Examiner concludes that the presently claimed method would be inoperative for inducing an immune response specific for CT875.

Applicants respectfully traverse this basis of rejection and submit that SEQ ID NO:140 is, in fact, the polypeptide sequence of CT875. While the Examiner is correct that the specification as filed incorrectly stated that SEQ ID NO:139 set forth the amino acid sequence of CT875 and SEQ ID NO:140 set forth the amino acid sequence of CT622, this typographical error was corrected in the Preliminary Amendment filed January 15, 2004. Thus, the specification now correctly states that SEQ ID NO:140 sets forth the amino acid sequence of CT875 (page 17, line 3). The original typographical error was carried through to Example 4 and is corrected by the present amendment, as shown above. As further evidence that SEQ ID NO:140 recites the amino acid sequence of CT875, Applicants submit herewith two excerpts from the EMBL protein database. These protein database entries demonstrate that the protein of SEQ ID NO:140

(beginning MSIRGV following the initial His-tag) corresponds to CT875, whereas SEQ ID NO:139 (beginning MESGPE) corresponds to CT622.

In light of this clarification that SEQ ID NO:140 sets forth the amino acid sequence of CT875, Applicants submit that the claimed method of stimulating an immune response specific for a *Chlamydia* CT875 protein is operative and possesses utility. Accordingly, Applicants respectfully request that the Examiner reconsider and withdraw this basis of rejection.

Rejection Under 35 U.S.C. § 112, Enablement

Claims 19-26 stand rejected under 35 U.S.C. § 112, first paragraph, as allegedly failing to comply with the written description rejection. Specifically, the Examiner asserts that since the claimed invention is inoperative for the reasons described above, one skilled in the art would not know how to use the claimed invention.

Applicants respectfully traverse this basis of rejection. As described above, the invention is operative. Therefore, Applicants submit that the skilled artisan would be fully enabled to make and use the claimed invention, and respectfully request that the Examiner withdraw this basis of rejection.

Rejection Under 35 U.S.C. § 112, Written Description

Claims 19-26 stand rejected under 35 U.S.C. § 112, first paragraph, for allegedly failing to comply with the written description requirement. More specifically, the Examiner asserts that the limitation of “producing an immune response specific to CT875 using SEQ ID NO:140” has no clear support in the specification and claims as originally filed and, thus, constitutes new matter.

Applicants respectfully traverse this basis of rejection and submit that the skilled artisan would clearly understand that the presently claimed methods were in the possession of the inventors at the time of filing the instant application. This is readily apparent upon review of the teachings of the instant application as a whole, and particularly in light of the description in the instant specification of antigenic *Chlamydia* polypeptides, including CT875, as well as methods

of using these polypeptides to induce an immune response. Methods of stimulating an immune response by administering to a patient a polypeptide of SEQ ID NO:140 are described, *e.g.*, on page 3, lines 9-20. In addition, both antibodies and T cells specific for *Chlamydial* polypeptides set forth in the instant application are described, thereby teaching immune responses specific for the *Chlamydial* proteins described in the instant application, including CT875. Antibodies that specifically bind to a *Chlamydial* protein are described, *e.g.*, on page 3, lines 7-8, and T cells that specifically react with a *Chlamydial* protein are described, *e.g.*, on page 4, line 10. Thus, the skilled artisan would immediately appreciate that the claimed methods of inducing an immune response comprising administering a polypeptide having at least 95% identity to SEQ ID NO:140 (CT875) would stimulate an immune response specific for the CT875 protein.

In light of this identification of additional and specific written description support for the presently claimed methods, Applicants respectfully request that the Examiner reconsider and withdraw this basis of rejection.

The Director is authorized to charge any additional fees due by way of this Amendment, or credit any overpayment, to our Deposit Account No. 19-1090.

Applicants respectfully submit that all of the claims remaining in the application are now believed to be in condition for allowance. Favorable consideration and a Notice of Allowance are earnestly solicited.

Respectfully submitted,

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JEH:ms

Enclosure:

EMBL Protein Database Entries 084883 and 084627

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